AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims:

Claims 1 to 11 (cancelled)

Claim 12 (currently amended): A process for producing a ~~the~~ brake lining which is reinforced with carbon fibers and has a matrix which consists essentially of silicon carbide together with silicon and/or carbon, wherein the reinforcing fibers used are long fibers having a mean length of at least 10 mm which are aligned in the plane parallel to the friction surface, ~~as claimed in claim 1~~, which process comprises the following steps:

a) production of a fiber arrangement of carbon fibers arranged essentially in a plane, wherein the fibers may be present in the form of individual fibers, fiber bundles or fiber yarns and the fibers and/or fiber bundles or fiber yarns being bound by a carbonizable binder,

b) shaping and/or curing of the bound fiber construction under pressure and/or at elevated temperature, if desired followed by further densification by means of carbonizable carbon precursors,

c) carbonization or graphitization of the bound cured fiber construction to produce a shaped body comprising carbon reinforced with carbon fibers (C/C),

d) at least one further densification of the C/C shaped body by means of pyrolytic carbon formed either by liquid-phase infiltration with

carbonizable carbon precursors and subsequent carbonization or by gas-phase infiltration with carbon, and

e) infiltration of the densified C/C shaped body with a silicon melt and partial reaction of the silicon with at least part of the carbon in the shaped body to form silicon carbide, so as to give a composite ceramic comprising carbon fibers embedded in a matrix comprising SiC, Si and C (C/SiC)

such that the mass fraction of silicon in the material of the brake lining is at least 10 %, and the mass fraction of silicon carbide is from 10 % to 25 %, and wherein the uppermost layer exposed to friction has a volume fraction of at least 50 % of carbon fibres, and wherein the silicon content in the said friction layer is lower than the silicon carbide content in the said layer.

Claim 13 (original): The process as claimed in claim 12, wherein the silicon melt in step e) further comprises additional metals selected from the group consisting of titanium, iron, chromium, copper and molybdenum.

Claim 14 (currently amended): A method of use of the brake lining obtained by the process of claim 12 ~~as claimed in claim 1~~ in combination with brake discs made of C/SiC, comprising arranging the brake linings in a caliper which extends around the flat surfaces of the brake disk.

Claim 15 (previously presented): A method of use of a brake lining as claimed in claim 14 comprising fastening the brake lining on a metallic support, and combining

the said brake lining on the said support with brake discs made of CFC to yield a brake system.

Claim 16 (currently amended): A method of use of a lining as obtained by the process of claim 12 ~~as claimed in claim 1~~ as friction lining in a friction clutch, comprising combining the said lining with a clutch disk.